

Low Noise Amplifier

2.2-2.3GHz /0.7dB NF/48dB Gain/12dBm P1dB

Model: TLLA2.2G2.3G-48-07

TLLA2.2G2.3G-48-07 is a low noise amplifier with a typical small signal gain of 48 dB and a nominal noise figure of 0.7 dB across the frequency range of 2.2 to 2.3 GHz. The DC power requirement for the amplifier is +12 V DC/50 mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 2.2-2.3 GHz
- Gain: 48dB Typ
- Noise Figure: 0.7dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Communication systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	2.2		2.3	GHz
Small Signal Gain		48		dB
Gain Flatness		±0.5		dB
Noise Figure		0.7		dB
Output P1dB		12		dBm
Input VSWR		1.4		:1
Output VSWR		1.4		:1
DC Voltage		+12		V DC
DC Supply Current		50		mA
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	44.8*29.2*11	mm

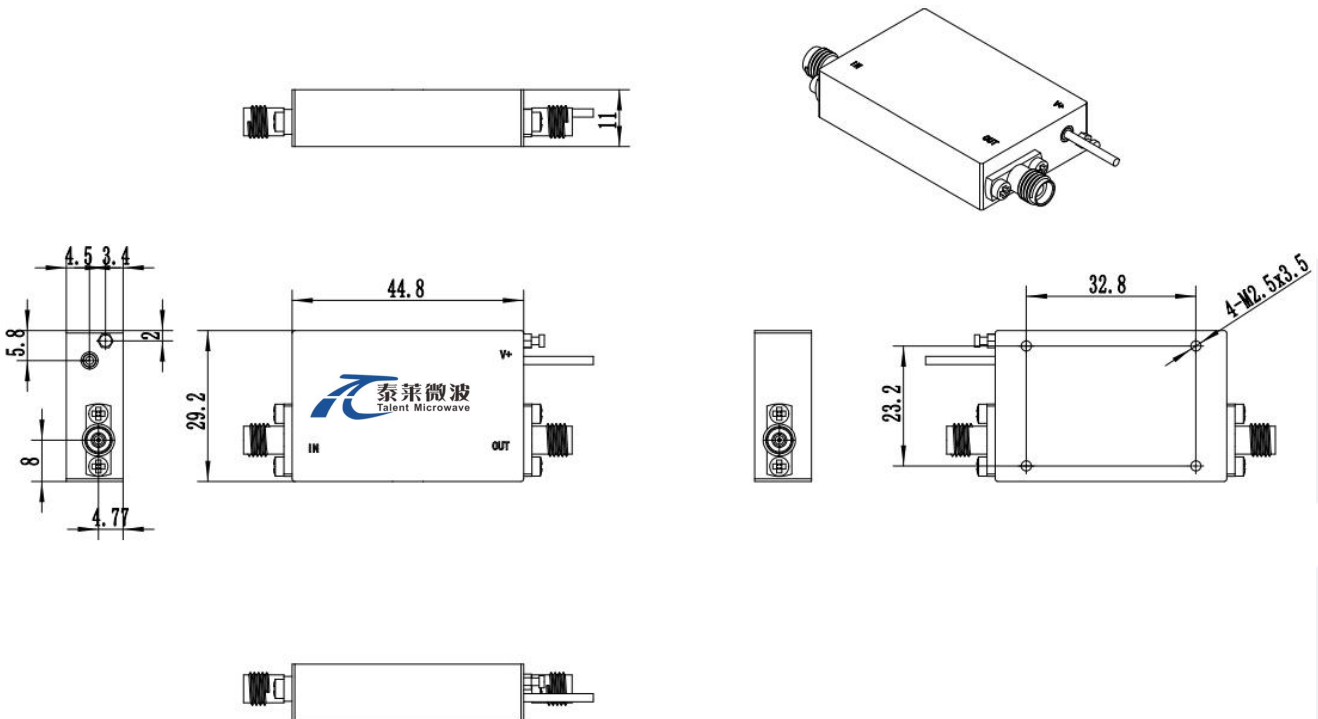
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm



*****Heat Sink Required During Operation**



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TLLA2.2G2.3G-48-07	Low Noise Amplifier, 2.2-2.3GHz, Noise Figure:0.7dB, Gain:48 dB,P1dB:12dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA2.2G2.3G-48-07-HS	Low Noise Amplifier, 2.2-2.3GHz, Noise Figure:0.7dB, Gain:48 dB,P1dB:12dBm,+12V DC,With Heatsink	Rev.1.1